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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,988	08/27/2003	Aaron W.J. Atkinson	46107-0083	4402

7590 10/28/2004
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EXAMINER

HO, HA DINH

ART UNIT	PAPER NUMBER
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3681

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,988

Applicant(s)

ATKINSON ET AL. 

Examiner

Ha D. Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/27/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This is the first Office Action on the merits of Application No. 10/648,988 filed on 8/27/03. Claims 1-16 are currently pending.

Election/Restrictions

2. Applicant's election without traverse of claimed invention of group 2, claims 7-16, in the reply filed on 9/21/04 is acknowledged.

3. Claims 1-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 9/21/04.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

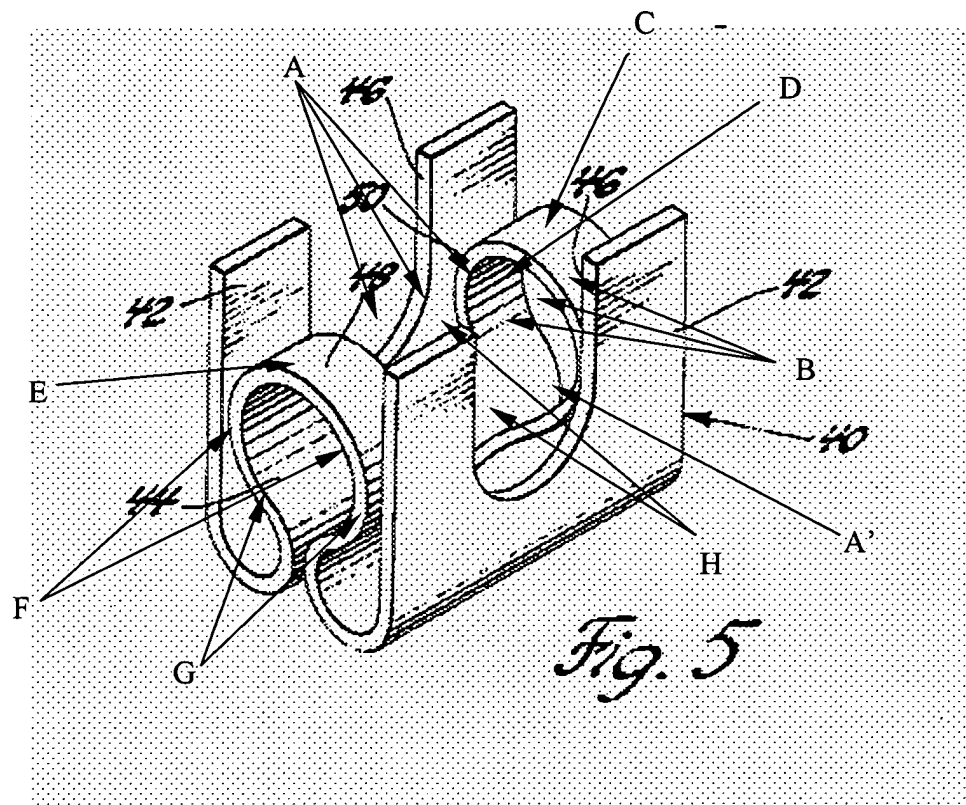
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 7-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Duer (US 3,874,250).

Regarding claims 7 and 12, Duer teaches a differential assembly comprising a differential case (10), a pairs of side gears (34), a pair of pinion gears (22) coupled to a pinion shaft (18), a biasing element (40) comprising a center section (44) defining a center opening (A) (see the

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Figure below), a pair of legs (42) disposed on each side of the center section (44), each of the legs defining a cavity (A') having an open side (B) and wherein each of the center opening (A) and the open sides (B) face the same direction (i.e., upward direction).



Regarding claim 8, the biasing element further includes an insertion side (C), the center opening (A) further includes an insertion opening (D), the open sides (B) and the insertion opening (D) are located on the insertion side (C).

Regarding claims 9, 10, 13 and 14, the center section (44) further defines a base (E) and a pair of side walls (F) extending from the base (E), each of the side walls includes engagement detents (G) being opposing arcuate segments defined by the side walls (F), the pinion shaft (18) is seated within the opposing arcuate segments (G).

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Regarding claims 11 and 15, the center section (44) includes a side opening (H) in each of the side walls (F), the openings (H) further defining the cavities (A').

Regarding claim 16, the differential further includes a pair of output shafts (26) coupled to the side gears and being disposable within the cavities (A').

Cited Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Bossuet'883, Fitzner'592, Holdeman'560, and Engle'861 which each shows a differential gear including a biasing element for biasing the side gears.

Communication

7. Submission of your response by facsimile transmission is encouraged. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office on _____

(Date)

Typed or printed name of person signing this certificate:


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(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Examiner Ho whose telephone number is (703) 305-0738. The examiner can normally be reached on Monday-Friday from 7:30 A.M. to 5:00 P.M. Eastern Standard Time. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Mr. Charles Marmor, can be reached at (703) 308-0830. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168.

HDH
(703) 305-0738
October 26, 2004


HAHO
PRIMARY EXAMINER
Art Unit 3681 10/26/04